DOCUMENT RESUME

ED 063 917 JC 720 148

AUTHOR MacMillan, Thomas F.
TITLE A Profile of SBCC Graduates, June 1972: The Assessment of Educational Impact.
INSTITUTION Santa Barbara City Coll., Calif. Office of Research and Development.
PUB DATE 3 Jul 72
NOTE 23p.

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS Comparative Analysis; *Educational Benefits; *Junior Colleges; Norm Referenced Tests; *Personal Growth; *Student Characteristics; Student College Relationship; *Student Development; Student Opinion

ABSTRACT

To measure the educational and personal growth of students receiving associate degrees at Santa Barbara City College (SBCC) in June 1972, all 594 candidates for the degree were analyzed in terms of age, sex, academic aptitude, major, and transfer intention. In addition, student-perceived educational benefits were assessed by administering five standardized instruments rating Vocational Benefits, Humanistic Benefits, Critical Thinking Benefits, Human Relations Benefits, and Overall Change to a sample of 59 students. A comparison with national norms led to the following conclusions about the SBCC students: (1) they perceived a greater proportion of benefits in the areas of "background for further education" and development of "vocabulary, terminology and facts"; (2) they also perceived a greater gain in aesthetic sensitivity and appreciation; (3) they showed a lower proportion of growth in quantitative thinking; (4) they had lower gains in "friendships and loyalties" and "social development"; and (5) the majority reported significant growth and change while at SBCC. Other findings indicated that of the graduates, 41.4% intended to transfer, 62% were male, 27.3% were 20 or younger, and 41.8% were 21-30. (RN)

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

ED 063917

SANTA BARBARA CITY COLLEGE

July 3, 1972

Dr. Thomas F. MacMillan
Administrative Dean,
Admissions, Guidance and Research

Research Office Memo
12-72

A PROFILE OF SBCC GRADUATES JUNE, 1972: THE ASSESSMENT OF EDUCATIONAL IMPACT

JC 720 148

UNIVERSITY OF CALIF.
LOS ANGELES

JUL 19 1972

CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION

A PROFILE OF SBCC GRADUATES
JUNE, 1972:
THE ASSESSMENT OF EDUCATIONAL IMPACT

Background:

To assess patterns of flow and impact on students receiving associate degrees at Santa Barbara City College in June, 1972, the characteristics of all 594 candidates for the degree were analyzed in terms of age, sex, major, and transfer intention.

In addition, an assessment of student perceived educational benefits was made by drawing a sample of 59 students and administering five standardized instruments developed for the purpose by the Higher Education Program staff, Center for the Study of Evaluation, UCLA.

The resulting study provided the basis both for description of the entire graduating class, and for assessing educational and personal growth over at least two years at Santa Barbara City College.

Age:

Table I shows the comparison between the ages of all students enrolled, Fall, 1971 with the sample of graduates. There were two categories which showed significant differences: the graduating sample had a lower percentage of students in the youngest category and a higher percentage 31 or over. The interesting aspect of this comparison is that there was no apparent difference between the two groups in the range between 21 and 30.

Nationally, about two-thirds of all enrollments in community colleges are freshmen, so one would expect graduates to have a higher average age. The significantly greater proportion of students over 30, however, prompted an inquiry concerning the difference in possible goals of college for all students vs. older students.

An analysis was made of the stated goals of all Fall, 1971 students. Goals for students 26 and older were contrasted, with the results portrayed as Table II. The only area of major significance was that the older students showed a greater percentage of stated intention to complete the A.A. or A.S. degree, independent of their transfer or other plans.

Returning to Table I, the significantly higher percentage of students over 30 in the respondent group is consistent with the stated intent of all older students. Not only would we expect to find a higher average age, we would also be likely to find a disproportionate number of students over 30 in all graduating classes at Santa Barbara City College. Such a distribution also suggests the extensive and appropriate access students have to the college through the extended day offerings, which encourage older students to enroll.

Sex:

Table III compares the distribution by sex of all students enrolled, Fall, 1971 vs. all grads and all grads who responded to the questionnaire on educational benefits. There was an evident similarity between all grads and the

Table I

Age of SBCC Students

	All Fall 1971		All Graduates June, 1972 Respondents	
20 or Less	2,806	43.5	15	27.3
21-30	2,711	42.0	23	41.8
31 or Over	936	14.5	17	30.9
Totals	6,453	100.0	55	100.0

TABLE II

Goals for Younger Vs
Older Students
Fall, 1971

	All Students		Students 26 or Older	
	N	%	N	%
No Degree	697	10.8	30	5.7
AA, AS Degree	1139	17.6	154	29.6
Degree & Transfer	2675	41.5	206	39.5
No Degree & Transfer	967	14.9	52	10.0
High School Diploma	124	1.9	7	1.3
Certificate of Completion	554	8.7	55	10.5
Specific Skills, No Degree	297	4.6	18	3.4
	6453		522	

TABLE III

Sex of SBCC Students

	All Fall, 1971		All Graduates		All Graduating Respondents	
Male	3,894	60.3	367	62.0	29	50.0
Female	2,559	39.7	227	38.0	29	50.0
Totals	6,453	100.0	594	100.0	58	100.0

entire student population. For the respondents, however, there were approximately 12% more female and 12% fewer male respondents. In interpreting the responses presented in a later section of this paper, it is likely that there will be a bias by sex introduced into the findings. Since the national data referred to below have not been presented by sex, it is not possible to determine whether the local data can be reasonably compared, although it is assumed that it will be. More importantly, the bias of the sample suggests that generalizing about benefits derived by students graduating from SBCC must be done cautiously.

Academic Aptitude:

To ascertain whether graduates in the responding sample represent only the most academically talented survivors of a two-year or more pattern, a comparison was made with a sample of Fall, 1970 entering students--the class of 1972. The results are given as Table IV.

There was not a significant difference between 1970 entering and 1972 responding students. Insofar as the respondents represent all grads, it appears that students from the entire range of academic aptitude are indeed surviving and completing their educational objectives.

Majors:

For purposes of description and comparison, student majors were classified as "Liberal Arts," "Vocational" (including health occupations), "Business" and "General Studies." The comparisons in Table V show that graduates and graduate respondents do not differ significantly from the entire student population. Roughly 45% in all categories of students are declared as "General Studies;" about 30% are "Liberal Arts;" about 20% are "Vocational," and about 5% are "Business." The distribution suggests that graduates in each group parallel the student body at large. This finding is particularly interesting regarding the general studies student. In the view of some, a "general" declaration is tantamount to no commitment at all--students in this category are merely undecided and would not be expected to make normal educational progress until they declared a "real" major. The figures in Table V suggest this to be an unrealistic evaluation perspective.

Transfer Plans:

Tables VI and VII show the reported student intent to transfer after graduation from SBCC in contrast to declared major intent. Essentially, Table VII is just another aggregation of the data in Table V, but it is given to dramatize the difference between the percentages of non-transfer intent (58.6%) and non-transfer major (34.1%).

Two possible questions arise out of this apparent discrepancy: (1) what proportion of vocational majors actually intend to transfer; (2) what proportion of liberal arts or general studies majors actually do not intend to transfer?

To answer these questions, a cross tabulation was made for major and transfer intention of 53 graduating respondents. The results are given in Table VIII.

Table IV

Academic Aptitude (SCAT-T)

1970 Entering Vs. 1972 Responding Graduates

Sample	N	Mean	S.D.
1970	185	294.67	13.1
Responding Graduates	40	300.25	17.0

Difference: 5.58, $\bar{z}$ = .721, not significant.

TABLE V

Majors

	All Fall, 1971		All Graduates		All Graduates Respondents	
	N	%	N	%	N	%
Liberal Arts	1,929	29.9	138	23.2	15	25.4
Vocational (Technical, Health)	1,387	21.5	167	28.1	19	32.2
Business	187	2.9	35	5.9	5	8.5
General Studies	2,950	45.7	254	42.8	20	33.9
Totals	6,453	100.0	594	100.0	59	100.0

TABLE VI

Transfer Intent of 1972 Graduates

	N	%
Transfer	246	41.4%
State C or U	(105)	(42.7)
UCSB	(72)	(29.3)
Westmont	(11)	(4.5)
Other	(58)	(23.5)
Non Transfer	348	58.6%
Total	594	100.0%

TABLE VII

Classification of Major of 1972 Graduates

	N	%
General Studies or Liberal Arts	392	65.9%
Non-Transfer, Vocational or Occupational	202	34.1%
Total	594	100.0%

Table VIII

Cross Tabulation of Major and Transfer Intent
SBCC Graduate Respondents

Category	N	%
Transfer, Liberal Arts or General Studies Major	26	49.1%
Non-transfer, Liberal Arts or General Studies Major	5	9.4%*
Transfer, Vocational Major	17	32.1%
Non-transfer, Vocational Major	5	9.4%*

*Significant at $p. < .05$ $Z = 2.351$

The inference to be derived from Table VIII is that significant proportions of students progress beyond the associate degree in unexpected ways. This is true both for vocational majors who continue their education and for liberal arts majors who terminate their education at the A.A. level. From one perspective, students with relatively career oriented intentions are apparently encouraged in significant proportions to continue their career preparation in a four-year college. From another, significant proportions of students are using the community college as the primary source of their liberal arts education without any current plan for further education. This last interpretation suggests that the role of the community college as a general studies institution, aside from its transfer function or its entry-level career function, is viable as students use it.

The Assessment of Educational Benefits:

The Center for the Study of Evaluation at the University of California, Los Angeles, developed a kit of several short self-assessment instruments by means of which students could evaluate several aspects of their college experience. The majority of these instruments were initially administered in 1969 to random samples of approximately 7,500 upperclassmen and 10,000 freshmen at some 80 colleges and universities. No community colleges were included in this national sample. For purposes of comparison, the responses of a sample of Santa Barbara City College graduates were placed against those of students in "state colleges and other less comprehensive universities." There were two reasons for selecting this particular comparison group. First, the state college and less comprehensive university (SCU) sample did not vary from the total national sample opinion by more than six per cent on any single item in any one of the scales selected. Second, the transfer pattern of community college graduates would suggest that the SCU sample could provide an acceptable point of reference in the absence of any community college data.

The specific scales chosen for comparison were: Vocational Benefits; Humanistic Benefits; Critical Thinking Benefits; Human Relations Benefits, and; Sources and Magnitude or Overall Change. The findings are presented in Tables IX through XIV below. Again, inferences from any comparisons between SBCC and national sample responses must be regarded as extremely tentative, since no community college data are available. Within this limitation, however, some inferences about educational benefits can be drawn for the SBCC sample.

Vocational Benefits:

SBCC graduate respondents were transfer oriented in the majority of cases; 66% had non-vocational or non-business majors, and 41% declared an immediate transfer intent. The declared vocational or occupational majors accounted for 28% of all graduates. For item D in the scale portrayed in Table IX, the percentage of respondents reporting "very much" benefit in specific skills and techniques related to a job was almost precisely similar to the percentage of declared career majors.

For the other three items in the scale, at least two-thirds of the SBCC respondents reported substantial gains. On two of the items, SBCC students showed statistically significantly greater proportions of "very much" gain reported. For our graduates, there was a measurably higher gain in "background for further education" and development of a command of "vocabulary, terminology and facts" than the national sample.

TABLE IX

Student Self-assessment of Vocational Benefits
National Sample, State College and University Students Vs
Santa Barbara City College Graduate Respondents

A. Background and specialization for further education in some professional, scientific or scholarly field.

	Very little	Some	Quite a Bit	Very Much
National	5.0%	30.0%	40.0%	* 25.0%
SBCC Sample	6.8%	18.6%	32.2%	* 42.4%

B. Bases for improved social and economic status

	Very little	Some	Quite a Bit	Very Much
National	4.0%	28.0%	44.0%	24.0%
SBCC Sample	3.4%	28.8%	47.4%	20.3%

C. Vocabulary, terminology and facts in various fields of knowledge

	Very little	Some	Quite a Bit	Very Much
National	4.0%	26.0%	52.0%	** 19.0%
SBCC Sample	0.0%	10.2%	52.5%	** 37.3%

D. Vocational training--skills and techniques directly applicable to a job

	Very little	Some	Quite a Bit	Very Much
National	23.0%	31.0%	24.0%	22.0%
SBCC Sample	22.1%	32.2%	16.9%	28.8%

* Based on the assumption that 25% is the population proportion, SBCC difference is 17.4% higher; $Z = 2.718$, $p. < .05$. There is a significantly higher proportion of change in this reported dimensions for SBCC repondents.

** Based on the assumption that 19.0% is the population proportion, SBCC difference is 18.3% higher; $Z = 2.905$, $p. < .05$. There is a significantly higher proportion of change in this reported dimension for SBCC students.

The role of the community college to prepare students for further education, viewed in the context of the intention of the SBCC sample to pursue transfer plans, seems to have yielded a strong impact on our students. This finding is made the more emphatic in contrast to the national sample.

Humanistic Benefits:

The general education function is stated in the catalog of aims and purposes of virtually every community college. Table X presents student self-assessments of benefits in the areas of cultural awareness, aesthetic sensitivity and appreciation, and communication. For each question in this scale, the majority of SBCC respondents reported substantial gains. In the area of aesthetic sensitivity--appreciation of art, music and drama, local students reported a statistically significantly greater gain than the national sample, as reflected in the higher proportion of "very much" responses. In the area of written and spoken communications, 64% of SBCC students showed substantial gains, as contrasted with 52% of the national sample. Again, a difference of a magnitude of 12% is statistically significant, with local students reporting an exceptional benefit.

Critical Thinking Benefits:

Another aspect of general education is development of critical thinking. As in the tables above, Table XI shows that the majority of students at SBCC reported substantial gains in the five areas assessed by the scale.

For the item related to "quantitative thinking," a significantly lower proportion of local respondents indicated "very much" benefit, compared with the national sample. The mathematics requirement at SBCC has been defined for the past several years so that it may be met either by a satisfactory score on a math placement examination or completion of at least one mathematics course. Under the revisions in Title V that are scheduled to be implemented in the Fall of 1973, the traditional requirements are abandoned as far as the State is concerned, and the math requirement is being seriously questioned locally. In this context, the relatively lower perceived growth for graduates is no real surprise. Since the majority of liberal arts and general studies students meet the requirement by entrance examination, the college has made no major commitment outside of Basic Math to develop competence in the concepts of "probability, proportion, margin of error, etc."

Human Relations Benefits:

The absence of any comparative data in the national sample makes it difficult to interpret the scale on human or interpersonal relations. The difference between the community college and other segments of higher education would be expected to have an impact on development of interpersonal relationships self-consciously fostered by the environment of the institution. The preponderance of commuting students, 65% of whom travel in their own cars to and from school; working students, 36% of whom are employed at least 20 hours per week; and students whose residence is still with their parents, which accounts for 43% of the population: all factors combine to minimize the opportunity for interpersonal growth that would normally be expected in a residential, highly interactive college.

TABLE X

Student Self-Assessment of Humanistic Benefits
National Sample, State College and University Students
Santa Barbara City College Graduate Respondents

A. Awareness of different philosophies, cultures, and ways of life.

	Very little	Some	Quite a Bit	Very Much
National	5.0%	27.0%	37.0%	31.0%
SBCC Sample	6.8%	20.3%	37.3%	35.6%

B. Broadened literary acquaintance and appreciation

	Very little	Some	Quite a Bit	Very Much
National	10.0%	35.0%	34.0%	21.0%
SBCC Sample	8.5%	25.4%	37.3%	28.8%

C. Aesthetic Sensitivity---appreciation and enjoyment of art, music, drama

	Very little	Some	Quite a Bit	Very Much
National	11.0%	35.0%	34.0%	* 21.0%
SBCC Sample	10.2%	30.5%	23.7%	* 35.6%

D. Writing and Speaking---clear, correct, effective communication

	Very little	Some	Quite a Bit	Very Much
National	8.0%	40.0%	38.0%	14.0%
SBCC Sample	1.7%	33.9%	44.1%	20.3%

* Based on the assumption that 21.0% is the population proportion, the SBCC sample was 14.6% higher; $Z = 2.355$, $p. < .05$. The SBCC respondents reported a significantly greater benefit in this dimension.

TABLE XI

Student Self-assessment of Critical Thinking Benefits
National Sample of Upperclassmen, Estimates vs
Santa Barbara City College Graduate Respondents

A. Reasoning ability--recognizing assumptions, making logical inferences, and reaching correct conclusions

	Very little	Some	Quite a Bit	Very Much
National Estimates	4.0%	27.0%	44.0%	25.0%
SBCC Sample	6.8%	23.7%	52.6%	16.9%

B. Ability to see relationships, similarities and differences between ideas.

	Very little	Some	Quite a Bit	Very Much
National Estimates	4.0%	27.0%	44.0%	25.0%
SBCC Sample	1.7%	23.7%	47.5%	27.1%

C. Understanding the Nature of Science, experimentation and theory

	Very little	Some	Quite a Bit	Very Much
National Estimates	4.0%	27.0%	44.0%	25.0%
SBCC Sample	6.8%	30.5%	39.0%	23.7%

D. Skepticism - ability to withold judgement, raise questions and examine contrary views

	Very little	Some	Quite a Bit	Very Much
National Estimates	4.0%	27.0%	44.0%	25.0%
SBCC Sample	3.4%	23.7%	54.3%	18.6%

E. Quantitative thinking---understanding concepts of probability, proportion, margin of error, etc.

	Very little	Some	Quite a Bit	Very Much
National Estimates	4.0%	27.0%	44.0%	* 25.0%
SBCC Sample	11.8%	33.9%	44.1%	* 10.2%

* Assuming 25.0% to be the population proportion, the difference is 14.8% lower for the SBCC sample; $z = 3.580$, $p < .05$. The SBCC sample reports significantly lower benefit in this dimension.

Table XII illustrates some of the differences between the local and national samples. On the two items specifically relating to interpersonal relations and friendships, SBCC students reported significantly lower proportions of "very much" benefit. On the other hand, the more abstract question on "moral and ethical standards," a significantly higher proportion of local students showed significant gains. The latter question is clearly different from the other two, and is more closely related, perhaps, to the scale on Humanistic benefits than to Human Relations.

The reported gains by SBCC grads should not be minimized because they are different from the national sample. On items A, C, D and E, over 70% of the students reported significant gains, particularly in self-understanding, autonomy and tolerance of divergent views.

Overall Change:

Table XIII presents the SBCC sample responses to eight dimensions of overall change. No national data were available to compare, but the local pattern of self-perceived change is relatively consistent with the indications from tables above. The majority of students reported developing an interest in new fields of knowledge, a sense of identity and self-confidence, career plans and skills, and a positive attitude toward this college.

Students were more reserved in their estimates of the impact of the college experience on their own personal world view and philosophy, and were particularly modest in their estimate of the impact of college on their social skills. On balance, a minimum of 88% of the respondents reported at least "some" change while at SBCC.

Sources of Significant Change:

Although the results of this question are given as Table XIV, perhaps the more interesting responses were not tabulated at all. Several graduate respondents were careful to point out the problem of trying to assess what influences were most crucial, and what change was most pronounced. Asked about his "positive attitude toward this college," one student wrote:

> "If the places I have marked indicate to you that I have a negative attitude toward the college then you're all wrong; my attitude was positive before I arrived because of what I was told in high school and remained relatively unchanged during my work here at SBCC."

It was interesting how many students went beyond marking multiple choice questions to make sure we all understand the pitfalls of educational research, and to make sure we accepted their answers and comments with sincerity. One exceptional comment was:

> "I have loved this college from my very first class, and the reason has always been your most exciting, imaginative faculty. They possess teaching skills of the highest order, tremendous enthusiasm for their subject matter, a communicative touch, and an accessibility to their students."

TABLE XII

Stude..ts Self-assessment of Human Relations Benefits
National Sample, State College and University Students Vs
Santa Barbara City College Graduate Respondents

A. Personal Benefits---understanding one's abilities and limitations, interests and standards of behavior

	Very little	Some	Quite a Bit	Very Much
National Sample	3.0%	14.0%	40.0%	44.0%
SBCC Sample	3.4%	22.1%	39.0%	35.5%

B. Development of friendships and loyalties of lasting value

	Very little	Some	Quite a Bit	Very Much
National Sample	7.0%	19.0%	28.0%	* 47.0%
SBCC Sample	11.8%	28.8%	25.5%	* 33.9%

C. Appreciation of individuality and independence of thought and action

	Very little	Some	Quite a Bit	Very Much
National Sample Sample	6.0%	20.0%	37.0%	37.0%
SBCC Sample	1.7%	23.7%	35.6%	39.0%

D. Social Developemnt-experience and skill in relating to other people

	Very little	Some	Quite a Bit	Very Much
National Sample	3.0%	19.0%	37.0%	** 41.0%
SBCC Sample	8.5%	20.3%	44.1%	** 27.1%

E. Tolerance and understanding of other people and their views

	Very little	Some	Quite a Bit	Very Much
National Sample	3.0%	17.0%	43.0%	37.0%
SBCC Sample	0.0%	20.3%	39.0%	40.7%

F. Appreciation of religion---moral and ethical standards

	Very little	Some	Quite a Bit	Very Much
National Sample ***	31.0%	32.0%	24.0%	14.0%
SBCC Sample ***	18.6%	32.3%	28.8%	20.3%

(Table XII continued)

* Based on the assumption that 47.0% is the population proportion, the difference is SBCC 13.1% lower; $Z = 2.140$, $p. < .05$. SBCC respondents reported a significantly lower benefit in this dimension.

** Based on the assumption that 41.0% is the population proportion, SBCC 13.9% lower; $Z = 2.400$. $p. < .05$.

*** Based on the assumption that 31.0% is the population proportion, SBCC 12.4% lower; $Z = 2.48$, $p. < .05$.

TABLE XIII

Student Self-assessment of Overall Change
SBCC Graduates Respondents Only

A. Development of a world view and personal philosophy

little/none		Some		Very Much	
N	%	N	%	N	%
5	8.6	30	51.7	23	39.7

B. Development of an interest in new fields of learning

little/none		Some		Very Much	
N	%	N	%	N	%
2	3.4	20	34.5	36	62.1

C. Development of general thinking skills

little/none		Some		Very Much	
N	%	N	%	N	%
1	1.7	30	51.7	27	46.6

D. Development of an identity and sense of self-confidence

little/none		Some		Very Much	
N	%	N	%	N	%
2	3.4	18	31.1	38	65.5

E. Development of Social Skills

little/none		Some		Very Much	
N	%	N	%	N	%
8	13.8	38	65.5	12	20.7

F. Development of Career Plans and skills

little/none		Some		Very Much	
N	%	N	%	N	%
7	12.0	19	32.8	32	55.2

G. Development of a positive attitude towards this college

little/none		Some		Very Much	
N	%	N	%	N	%
2	3.4	17	29.4	39	67.2

H. Overall estimate of Change (all responses)

little/none		Some		Very Much	
N	%	N	%	N	%
27	6.7	172	42.4	207	50.9

TABLE XIV

Source of Significant Change
All Graduate Responses
SBCC

Source or Agent of Change	Number of Responses	% of responses
Faculty	189	24.2
Courses	173	22.1
Fellow students	93	11.9
General Maturity	146	18.7
Work Experiences	181	23.1

That the two or more years at SBCC leading to the associate degree had an impact on students beyond what they gained from their "general maturity" seems to be strongly suggested by all of the data above, but particularly valuable were the personal observations received from so many students.

Summary:

A description was made of all 594 associate degree students graduating from Santa Barbara City College in June, 1972 on the variables of age, sex, major, and transfer intent. In addition, a sample of 59 respondents (10% sample) was identified to conduct an assessment of various educational benefits from their experience at SBCC.

Age: 27.3% of the graduates were 20 or younger; 41.8% were 21-30; 30.9% were over 30. The oldest was a 56 year old female philosophy major.

Sex: 62.0% male; 38% female, corresponding almost identically with the student body as a whole.

Major: 42.8% general studies; 28.1% vocational (including health); 23.2% liberal arts; 5.9% business.

Transfer Plans: 41.4% intended to transfer; 105 to a state campus, 72 to UCSB, 58 elsewhere and 11 to Westmont. 58.6% reported no transfer plans. An analysis of the sample showed that a significant proportion of liberal arts majors did not declare a transfer intent, suggesting that the general education function as a separate role of the community college is perceived as viable as students experience it.

Vocational Benefits: A local sample of graduates showed a significantly greater proportion of perceived benefit on two of four items in this scale, as compared with a national sample.

Humanistic Benefits: The local sample showed a significantly greater gain in their perceived aesthetic sensitivity and appreciation of art, music and drama than the national sample.

Critical Thinking Benefits: The national sample had a significantly higher reported proportion of growth in "quantitative thinking" than the local respondents.

Human Relations Benefits: The national sample reported significantly higher gains in "friendships and loyalties" and "social development" than SBCC respondents. Local students reported significantly greater gains in "appreciation of religion, moral and ethical standards."

Overall Changes: The majority of SBCC students reported "very much" growth and change during their experience at SBCC.

Source of Change: The most significant sources of change as perceived locally were: faculty (24.1%), work experiences (23.1%), courses (22.1%), general maturity (18.7%) and fellow students (11.9%).

The profile of educational benefits is a recent development in research in higher education. As the availability of standardized instruments for such assessment is improved, it will be possible to conduct more complete studies of student change during their college experience.

As a preliminary study, it is hoped that the data presented here will be useful as a data base against which to compare future profiles of Santa Barbara City College graduates.